

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A resin recycling system comprising:
crushing means for individually crushing resin mold products into crushed resinous pieces in which 70% or more of the crushed resinous pieces have an equivalent diameter in a range from 1 to 50 mm;
packing means for packing the crushed resinous pieces ~~of the respective mold product~~ into a bag having a transparent portion;
classification means for irradiating a light beam to the crushed resinous pieces in the bag through the transparent portion, identifying a kind of the crushed resinous pieces based on a reflected beam therefrom, and classifying the bags into respective kinds of resins; and
cleaning means for taking the crushed resinous pieces out from the bag and cleaning the crushed resinous pieces ~~of the respective kind~~ to remove foreign matters adhered on the surface thereof said cleaning means comprises a cleaning vessel and an agitating member provided in the cleaning vessel, and an abrasive surface for removing the foreign matters on the surface of the crushed resinous pieces is provided on at least part of the inner wall of the cleaning vessel and/or the surface of the agitating member.

2. (original) A resin recycling system as defined by claim 1, further comprising:
recovery means for separating foreign matters from a mixture of the crushed resinous pieces and the foreign matters, and recovering the crushed resinous pieces.

Claim 3 (canceled)

Claim 4 (canceled)

5. (original) A resin recycling system as defined by claim 1, further comprising:
conveyer means for conveying the bag; and

wherein said classification means comprises identification means, provided in the vicinity of a predetermined identification position on a conveying path of said conveyer means, for irradiating a light beam to the crushed resinous pieces in the bag through the transparent portion of the bag passing by the identification position and identifying the kind of crushed resinous pieces based on a reflected beam therefrom, and

storage means for storing the identified kind of crushed resinous pieces and an expected arrival time at which the bag of the crushed resinous pieces would reach a predetermined classification position on the conveying path, while maintaining the correspondence between both the stored data,

said classification means being disposed in the vicinity of said predetermined classification position, and operating to classify and collect the respective bag as the crushed resinous pieces in the bag reaching the classification position is of the kind stored in correspondence to the expected arrival time which is the same as the current time.

Claims 6-17 (canceled)

18. (new) A resin recycling system comprising:

a crusher that includes an endless conveyor for conveying polymer mold products, and an opposed member having an opposed surface confronting at least one end of said endless conveyor on a conveying-directional side and disposed so that a distance between the opposed surface and a conveying surface of said endless conveyor becomes smaller in a conveying direction, wherein crushing edges or crushing pins are provided on at least one of the conveying surface of said endless conveyor and the opposed surface of said opposed member, to direct toward the other, whereby the polymer mold products transported by said endless conveyor are pushed into a gap between the conveyor and the opposed member and crushed with said crushing edges or pins to provide crushed resinous pieces;

a packaging device for packing crushed resinous pieces into a bag having a transparent portion;

an identification device for irradiating a light beam to the crushed resinous pieces in the bag having a transport portion, detecting the reflected beam or the dispersed beam from the crushed

resinous pieces by a sensor element, and identifying a kind of the polymer product based on a detected result, wherein said sensor element is disposed at a predetermined position in the vicinity of a conveying path of the crushed resinous pieces; and

a device for cleaning the crushed pieces that include a vessel and agitating blades, wherein the vessel has an entrance port for crushed resinous pieces and a water supply port, both provided in an upper portion thereof, and an exit port for the crushed resinous pieces and a drainage port, both provided in a lower portion provided thereof; and drainage line for adjusting a water level being connected to the drainage port, and at least part of the inner surface of the vessel and/or surfaces of the agitating blades being roughened.